

## **ABSTRACT**

A commercial and institutional kitchen retrofit system for **1.** the automatic daily cleaning of commercial kitchen exhaust hoods and flues, **2.** a low pressure, low volume, recirculating cleaning system designed for the removal of oily residue from hard surfaces and the accelerated bioremediation of the resulting collective hydrocarbon waste, **3.** the collection and elimination of roof-top grease accumulations, **4.** the systematic on site incubation and enhanced propagation of cultured, hydrocarbon specific, bacterial microorganisms in an automatically mixed aqueous solution containing PH neutral oxidizers and hydrocarbon base emulsifiers altogether, producing a regenerative, recyclable cleaning solution specifically developed for use in **5.** and the automatic daily introduction of an oxygen enriched, microbe charged solution into kitchen drain lines, thereby reducing the stoppage of drains caused by the solidification of grease and ultimately promoting the biodigestation and reduction of accumulated grease in the main grease trap integral to the sewer system.